

VASCULAR PLANTS NEW TO KENTUCKY

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ABSTRACT

Fourteen species of vascular plants are reported new to the state of Kentucky, U.S.A. Five of these are European weeds: *Anthoxanthum aristatum*, *Aphanes microcarpa*, *Erysimum hieraciifolium*, *Lathyrus tuberosus*, and *Vicia tetrasperma*. The other nine are native species known from adjacent states and were, thus, not entirely unexpected: *Acalypha deamii*, *Carex austrocaroliniana*, *Centunculus minimus*, *Elymus wiegandii*, *Equisetum* × *ferrissii*, *Leucothoe fontanesiana*, *Lupinus perennis*, *Polygonum cilinode*, and *Silene nivea*.

RESUMEN

Se presentan 14 especies de plantas vasculares que fueron descubiertas como nuevas para el estado de Kentucky, EE.UU. Cinco de éstas son malezas de Europa: *Anthoxanthum aristatum*, *Aphanes microcarpa*, *Erysimum hieraciifolium*, *Lathyrus tuberosus*, y *Vicia tetrasperma*. Las otras nueve son especies nativas ya conocidas de los estados de alrededor y, por eso, no fueron totalmente inesperadas: *Acalypha deamii*, *Carex austrocaroliniana*, *Centunculus minimus*, *Elymus wiegandii*, *Equisetum* × *ferrissii*, *Leucothoe fontanesiana*, *Lupinus perennis*, *Polygonum cilinode*, y *Silene nivea*.

DISCUSSION

A recent dissertation (Medley 1993) and a recent book (Browne & Athey 1992) provided lists of the vascular flora of Kentucky and are the comparative basis for our records. We report the following species to make knowledge of their presence available not only to other in-state workers but also to the botanical community at large. Gleason and Cronquist (1991) was used for distributional information outside Kentucky and is the main source of the nomenclature used here. Taxa not present in Gleason and Cronquist were found in Radford et al. (1968). All specimens are deposited at the Berea College Herbarium [BEREA].

Acalypha deamii (Weath.) Ahles (Euphorbiaceae)—Reported in mesic sites from southern Indiana and Ohio to Tennessee and Arkansas. Levin (1999) did not report this species from Kentucky.

Madison Co.: Fort Boonesborough State Park, SW of junction of KY 627 and the Kentucky River, upper riverbank, rare; associates: *Campanula americana*, *Commelina virginica*, *Lobelia siphilitica*, *Stachys* spp., *Teucrium canadense*; 26 Sep 1992, Abbott 4464. Verified by John Thieret [KNK].

Anthoxanthum aristatum Boiss. (Poaceae)—Native to Europe; introduced throughout the northeastern United States.

Trigg Co.: Land Between The Lakes, Elk-Bison Prairie, entranceway and the Trace Road, locally frequent; associates: *Andropogon virginicus*, *Bromus japonicus*, *Carex hirsutella*, *Chamaecrista fasciculata*, *Hedyotis canadensis*, *Lespedeza cuneata*, *L. striata*, *Panicum lanuginosum*, *Smilax glauca*, *Solidago canadensis*, *Tripsacum dactyloides*, *Vulpia octoflora*; 27 Jun 1998, Thompson 98-282. Verified by John Thieret [KNK].

Aphanes microcarpa (Boiss. & Reuter) Rothm. (Rosaceae)—Native to southern Europe. In United States from Long Island to Alabama.

Madison Co.: Fort Boonesborough State Park, SW of junction of KY 627 and the Kentucky River, mowed yard in campground, rare, only one population seen; associates: *Medicago lupulina*, *Plantago* spp., *Poa* spp., *Trifolium* spp., *Veronica* spp.; 21 May 1994, Abbott 6898.

Carex austrocaroliniana Bailey (Cyperaceae)—A southern Appalachian endemic (Radford et al. 1968). First found in Kentucky in Laurel County by Thompson (Campbell et al. 1994), and now known to be found in other southeastern counties.

Laurel Co.: Rock Creek Research Natural Area, ca 30 km S of London off KY 1193 and 2 km W on F.S. 131, mixed mesophytic forest ravine at Rock Creek and Rockcastle River, occasional; associate: *Carex laxiflora*; 21 Apr 1985, Thompson 85-64. Verified by Rob Naczi [KNK].

Centunculus minimus L. [= *Anagallis minima* (L.) Krause] (Primulaceae)—An irregularly cosmopolitan species, especially in warmer areas. Reported from Kentucky, without explanation, by Radford et al. (1968). Medley (1993) cited an 1840, *Short s.n.*, Muhlenberg Co. collection at Philadelphia [PH], and he also stated that the specimen should be verified. David Hewitt [PH] was kind enough to send us a digital scan of the specimen, which is indeed this species and was reportedly common around Greenville in Muhlenberg Co. in western Kentucky. Our collection represents the first known population in Kentucky in over 150 years and its first documentation in east-central Kentucky.

Madison Co.: A wet ditch on the E side of northbound I-75 at KY 21 (Exit 77); associates: *Daucus carota*, *Rhexia virginica*, *Samolus floribundus*; 17 Jun 1995, Thompson 95-374. Verified by John Thieret [KNK].

Elymus wiegandii Fern. (Poaceae)—In northeastern North America and scattered to the west.

Lewis Co.: Manchester Island #1 (27 acres), in the Ohio River at mile 396, 1.3 mi E of Trinity Station, forested wetland [*Acer saccharinum*-*Populus-Platanus*], damp transition zone between forest and old field, near middle of island, rare; associates: *Boehmeria cylindrica*, *Laportea canadensis*, *Leersia virginica*, *Muhlenbergia frondosa*, *Polygonum virginianum*; 29 Jul 1995, Gelis MI-753.

Equisetum × ferrissii Clute (Equisetaceae)—According to the distribution maps in Hauke (1993), this sterile hybrid is more widespread in North America than *E. laevigatum* A. Braun, the parent it most closely resembles. Medley (1993) cited literature reports for *E. laevigatum* in Kentucky, but he said no voucher specimens are known.

Laurel Co.: Along Laurel River downstream of Laurel River Dam spillway (Whitley County line), sandy banks scattered among rocks and boulders, infrequent; associates: *Andropogon gerardii*, *Carex*

scabrata, *Phlox maculata*, *Physostegia virginiana*, *Rhododendron arborescens*, *Rudbeckia laciniata*, *Selaginella apoda*, *Spiraea virginiana*, *Thalictrum mirabile*, *Trautvetteria caroliniensis*; 1 Aug 1993, *Abbott 5970*. **Whitley Co.:** The above population was rediscovered across the narrow river, a few hundred feet downstream from the powerplant dam off the end of County Road 1193; handheld GPS coordinates 36° 57' 41"N 84° 16' 31" W [NAD 83 projection system]; 17 Jul 2001, *Abbott 14477*. This time strobili were present, which yielded spores that were misshapen and colorless, thus confirming the identity.

Erysimum hieraciifolium L. (Brassicaceae)—Native to Europe; naturalized in Canada, Michigan, and Wisconsin.

Laurel Co.: NNW of Hazelpatch, scattered along railroad tracks N of junction with C.R. 760 and S of Shetland Trace, E of the Little Rockcastle River, in gravel along railroad adjacent to mesic woods; 23 Jun 1993, *Abbott 5530*; London, just E of U.S. 25 on C.R. 1006 (toward Levi Jackson Wilderness Road State Park), then S along railroad tracks, along gravel embankment; associates: *Camelina microcarpa*, *Plantago aristata*, *Poa pratensis*, *Triodanis perfoliata*, *Tragopogon* sp.; 19 Jun 1994, *Abbott 6979*. Verified by John Thieret [KNK].

Lathyrus tuberosus L. (Fabaceae)—Native to Europe and western Asia. Known from a few areas in the United States, mostly in the north. Isely (1990) reported this species from Tennessee.

Madison Co.: Berea College Campus; S of the music building, in unmowed field adjacent to the NW end of the athletic fields, locally abundant sprawling vine, no record of it having been planted; 2 Jun 1992, *Abbott 2374*.

Leucothoe fontanesiana (Steud.) Sleumer (Ericaceae)—Native to the southeastern United States.

Madison Co.: Lower Dogfoot Springs, Berea College Forest, 1.6 mi S of Bighill (at junction of KY 21 and U.S. 421), and 0.2 mi S of Grant House entrance, in a NNW mesic mixed hardwood-hemlock ravine transversed by Grant House Creek, infrequent, several shrubs; associates: *Acer saccharum*, *Aesculus octandra*, *Cercis canadensis*, *Cornus florida*, *Lindera benzoin*, *Liriodendron tulipifera*, *Tilia americana*, *Toxicodendron radicans*, *Tsuga canadensis*; 12 Jul 1995, *Thompson 95-407*. This population was first found in 1982 by David D. Taylor [#1943, BEREA]. Later in the 1990s, this population was buried and extirpated during road construction on U.S. 421, but some shrubs were transplanted to the nearby Upper Dogfoot Springs. Some skeptics had claimed that this population may have just been persisting from cultivation by some 19th century settler, despite the lack of homesite remnants. Recently, however, a second population was brought to our attention by Ben Begley, increasing the likelihood that this species is naturally in Kentucky and has just been overlooked. **Harlan Co.:** Pine Mountain Settlement School, Pine Mountain, 3.1 mi SSE from Big Laurel on KY 221 at junction with KY 510, 2.2 mi E of Letcher Co., and 9.5 mi ESE from US 421, in a *Fagus grandifolia* and *Tsuga canadensis* stand with *Actaea alba*, *Hexastylis arifolia*, *Laportea canadensis*, *Polystichum acrostichoides*, *Rhododendron maximum*, *Thelypteris noveboracensis*, and *Tiarella cordifolia*; 5 May 2001, *Thompson 01-51*.

Lupinus perennis L. (Fabaceae)—Widely native in the eastern United States. Isely (1990) reported this species to the north, east, and south of Kentucky.

Rockcastle Co.: Horselick Surface-mined Area, 1.8 mi S of KY 1955 off Daugherty Road, open bench, rare; associates: *Cardamine hirsuta*, *Trifolium pratense*, *T. repens*, *Veronica arvensis*; 14 Jun 1987, *Thompson 87-735*.

Polygonum cilinode Michx. (Polygonaceae)—Native to northeastern North America and south, in the mountains, to North Carolina.

Lewis Co.: Manchester Island #2 (115 acres), in the Ohio River at mile 396, 1.3 mi E of Trinity Station, old field [*Rubus-Sambucus-Vitis*], E rim of island head, trailing down from upper terrace, rare; associates: *Erigeron philadelphicus*, *Ipomoea pandurata*, *Rudbeckia laciniata*, *Urtica dioica*, *Verbesina alternifolia*, *Vernonia gigantea*; 21 Jul 1995, *Gelis* M2-522.

Silene nivea (Nutt.) Otth. (Caryophyllaceae)—Widespread in the northeastern United States.

Lewis Co.: Manchester Island #1 (27 acres), in the Ohio River at mile 396, 1.3 mi E of Trinity Station, late old field [*Rubus-Sambucus-Acer negundo-Rosa-Vitis*], between old field at island head and shaded forest bottomland, infrequent; associates: *Impatiens pallida*, *Phalaris arundinacea*, *Stellaria aquatica*, *Urtica dioica*, *Verbesina alternifolia*; 24 Jun 1995, *Gelis* M1-389. Verified by John Thieret [KNK].

Vicia tetrasperma (L.) Moench. (Fabaceae)—Native of Eurasia and introduced at scattered stations in the eastern United States to Texas. Isely (1990) reported this species as occurring primarily on the coastal plain, but he also said that it was probably present in every southeastern state.

Madison Co.: Berea College Forest, Red Lick Reservoir, exposed south side of dam, lower slope, near cattail marsh, rare, one small population of 20–25 individuals; associates: *Melilotus alba*, *Trifolium repens*; 19 Jun 1996, *Gelis* 393.

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